



**ACADEMY OF INFORMATION
TECHNOLOGY & ENGINEERING**



2024 - 2025

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NOTE FROM THE SUPERINTENDENT



Dear Students and Families,

Stamford Public Schools is a diverse learning community of students from a wide range of backgrounds and with disparate interests. As a learning organization, Stamford Public Schools is committed to helping all students realize their academic potential. We do this by providing programs of study in a wide range of subjects, so all students are prepared for success beyond high school, whether they are pursuing a 2 or 4-year college degree, completing a technical training program, or joining the workforce immediately after graduation.

Our 2024-25 Program of Studies details the academic opportunities available to our more than 600 students at our Academy of Information Technology & Engineering (AITE). AITE offers unique concentrations in Information Technologies, Career and Technical Education, Architecture & Engineering, Business, Digital Arts, or Biomedical Sciences. Other opportunities that exist at AITE are the Cisco Networking Academy and Virtual High School. Developing such a rich and varied program of studies requires a great deal of time and effort. I am grateful to our teachers, administrators and the entire Teaching & Learning Department for their hard work in creating these wonderful opportunities for our students.

I encourage you to take some time as a family to examine the rich opportunities available to your children for the 2024-2025 academic year. If you have questions, please reach out to your child's school counselor. Our school counselors are certified professionals with the skills and expertise to help your child discover their academic strengths and interests and guide them in their high school journey.

Enjoy exploring the SPS Program of Studies and best of luck in the 2024-25 school year!

Dr. Tamu Lucero
Superintendent of Schools

This Program of Studies contains important information about educational opportunities available in our high schools. As you and your parent(s) review the information and course listings that appear in this guide, you should think about your strengths and interests as well as your short-term and long-term goals.

CREDIT REQUIREMENTS FOR GRADUATION

In order to obtain a high school diploma from the Stamford Public Schools, students are expected to demonstrate proficiency in Reading, Writing, Mathematics, and Science. School counselors are responsible for monitoring student progress in reaching graduation requirements. School counselors will inform parents of student progress and will work with teachers to help students reach proficiency in all academic areas.

District Required Courses and Credits for Graduation:

Students are required to accumulate **25** or more course credits, distributed as follows:

HUMANITIES	9 TOTAL CREDITS
➤ English	4 credits
➤ Social Studies	3 credits (0.5 in Civics)
➤ Arts	1 credit
➤ Subject Area Elective	1 credit (0.5 in Financial Literacy)
SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS	9 TOTAL CREDITS
➤ Mathematics (must earn credit in Algebra/Integrated I & Geometry/Integrated Math II)	3 credits
➤ Science	3 credits
➤ Subject Area Elective	3 credits
WELLNESS	2 TOTAL CREDITS
➤ Physical Education	1 credit
➤ Health and Safety Ed	1 credit
WORLD LANGUAGE	1 TOTAL CREDIT
GENERAL ELECTIVES	3 TOTAL CREDITS

AITE's Vision of the Graduate

- Graduates communicate effectively, orally and in writing, and utilize their communication skills for a variety of purposes and audiences.
- Graduates collaborate effectively with others to complete a task or a goal.
- Graduates apply critical thinking skills to solve problems and evaluate information.
- Graduates participate responsibly in their local and global communities.
- Graduates demonstrate resilience when they are flexible, persistent or can recover from failure or change.
- Graduates demonstrate good moral character when they are caring, responsible, trustworthy, fair, respectful, and/or good citizens.

CREDITS

Each student entering grade 9 is required to earn a minimum of 25 credits for graduation. As a general rule, the maximum total credits a student may earn each year is 8.

MASTERY-BASED LEARNING CREDIT (Course Code #3421)

Mastery-based learning is to ensure that a student has acquired the knowledge and skills that are deemed to be essential to success in every postsecondary - college and career environment and in adult life. Students will receive one credit upon successful demonstration of subject matter content mastery achieved through educational experiences and opportunities that provide flexible and multiple pathways to learning. These options include:

- ACT Score of English 18, Math 22, Reading 22, Science 23, ELA 20
- Capstone Project (prior approval required)
- FCIAC Recognition
- For EL students who have lived in Connecticut for fewer than five years, a score of proficiency or above on the LAS Links assessment
- Independent Study
- Recognition as an AP Scholar (receives a score of 3 or more on 3 AP exams)
- Recognition of achievement in a state or national competition in the areas of debate, literary, STEM, visual, CTE, or performing arts
- SAT Score College and Career Readiness Benchmark for Evidence-Based Reading and Writing: 480
- SAT Score College and Career Readiness Benchmark for Math: 530
- Seal of Biliteracy
- Student Self-Designed Project (prior approval required)
- Internship*
- Volunteer/Service Experience*
- Work-study Experience*

*Students can complete any combination of these Pathways to meet the requirement of 120 hours

SEAL OF BILITERACY

Stamford Public Schools recognizes students who have studied and attained proficiency in English and another language and have met specific requirements at the time of graduation by awarding a Seal of Biliteracy on their transcripts and diplomas. The seal recognizes the value of students' academic efforts, the tangible benefits of being bilingual and biliterate, and prepares students to be productive contributing members of our global society. The Seal of Biliteracy was adopted by the district in 2018.

COLLEGE LEVEL CURRICULA/COURSES

ADVANCED PLACEMENT (AP)

AP courses are designed to meet the objectives of rigorous first year courses at the college level as prescribed by the College Entrance Examination Board Advanced Placement Program. AP courses provide students with the opportunity to earn college credit, advanced placement, or both. Each AP course concludes with a college-level test, which is an essential part of the AP experience enabling students to demonstrate their mastery of college-level course work.

More than 90 percent of 4-year colleges grant credit and placement on the basis of successful AP exam scores. AP courses are offered in the following subject areas to prepare students for taking the AP examination: Art, English, Math, Music, Social Studies, World Languages, and the Sciences. The examinations are given in May.

Students who wish to receive the weighted credit of .07 for rank and grade point average (GPA) in those subjects are required to take the AP examination. To earn college credit a student must receive a passing score of 3 or higher on the AP exam. There are additional course requirements for AP classes, particularly during the summer. Students are expected to consult their AP teachers for those requirements. For more information, visit www.collegeboard.org.

HONORS COURSES (H)

Honors courses explore the subject matter in depth and in a comprehensive and accelerated approach. Courses are available in the following academic subjects: English, Mathematics, Science and Social Studies. These courses are intended for students who have demonstrated motivation, interest, and achievement in previous courses taken in this content area. Students are required to meet specific criteria for all honors courses. Successful completion of an honors course adds .05 weighted credit to a student's rank and GPA. For further information, contact the school counselor.



Ambar Vidal Hernandez

GRADING SYSTEM					
High Honor Roll = 4.0			Honor Roll =3.0		
Letter Grade	Number Value	Grade Point	Letter Grade	Number Value	Grade Point
A	93-100	4.00	D	63-66	1.00
A-	90-92	3.75	D-	60-62	0.75
B+	87-89	3.50	F	0-59	0.00
B	83-86	3.00	M	Medical	0.00
B-	80-82	2.75	P	Passing	0.00
C+	77-79	2.50	I	Incomplete	0.00
C	73-76	2.00	LC	Loss of Credit	0.00
C-	70-72	1.75	W	Withdrawn	0.00
D+	67-69	1.50	NG	No Grade	0.00

GPA

Each student will receive an unweighted and weighted GPA. The unweighted is computed by using the grade point average of the final marks earned by each student in grades 9-12 in all subjects except those on Pass/Fail (P/F). The weighted GPA is calculated by adding the following values to the unweighted GPA: .05 weight for each Honors class taken and .07 weight for each Advanced Placement and UConn ECE course taken.

While the rules and regulations outlined in the Program of Studies apply to all students, the school principal may make exceptions in the best educational interest of individual students.

HONOR ROLL

The Stamford Public Schools believes in recognizing students who demonstrate significant academic achievement through hard work and commitment. To earn honors in a marking period a student must be taking a minimum of 3 credits in that marking period. There are three levels of Honors:

- Honors with Distinction: Straight A's (includes A and A-)
- High Honors: All A's with the exception of one B (includes B+, B, and B-)
- Honors: All A's and/or B's with the exception of one C (includes C+, C, and C-)

All course grades will be included in the calculation for qualifying for Honor Roll. Honor Roll status will be indicated on report cards quarterly.

Note: New students enrolled in the Stamford Public Schools, who do not have grades awarded by the Stamford Public Schools, would not be included in the Honor Roll determination.

POST-SECONDARY PLANNING

School Counseling: Upon entering high school, students will develop a four-year plan of academic study that is challenging and fulfilling. Your plan will be shaped as you learn new information about yourself and the world of work. One of the services provided to help you with academic planning is Individual Planning Meetings between you and your school counselor. This meeting results in the development of your Student Success Plan with career, education, social-emotional, and post-secondary goals. You and your counselor will update the plan annually. Your plan is stored in *Naviance*, a web-based tool that also allows you to explore career options, research colleges and technical schools, complete interest inventories, and manage the college application process.

You will also participate in classroom or group school counseling lessons two-three times a year. Additionally, students will have the opportunity to participate in college and career events.

Career Counseling: Career development and awareness are integrated throughout the curriculum in all academic subject areas and across all grade levels. Your school counselor can assist you with all aspects of career development.

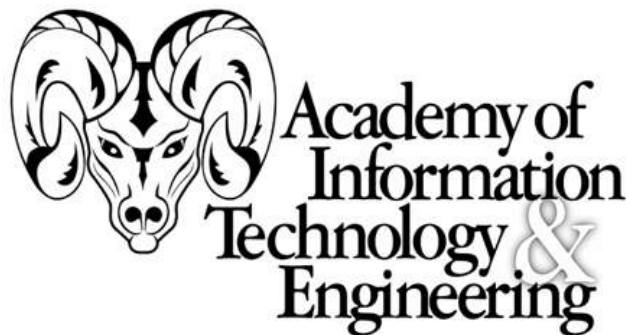
STANDARDIZED TESTING

Students should explore the various admission tests for post-secondary opportunities. The [ACT](#) (American College Test) is designed to measure high school students' college readiness in English, math, reading, science, and writing (optional). Students in their junior year and senior year in high school are encouraged to sit for the ACT. Students can qualify for fee waivers on test administration days throughout the year. For additional ACT information and test dates, visit [ACT resources](#).

The [PSAT/NMSQT](#) (Preliminary Scholastic Aptitude Test) is a diagnostic tool, provides real-time/real-place experience of a standardized assessment similar to the SAT, and is the qualifying test for National Merit Corporation scholarship opportunities for Juniors. The exam is offered to all sophomore and junior students during the school day in October, free of cost. We encourage all sophomores and juniors to take the PSAT and explore the [PSAT resources](#) that are available.

The [SAT](#) (Scholastic Aptitude Test) measures a high school student's readiness for college and provides colleges. The SAT is offered to all juniors in the spring, during the school day at their high school, free of cost. Students can qualify for fee waivers on test administration days throughout the year. Students should check the specific college requirements to determine if the institution is test-optional and if SAT Subject tests are required. For additional SAT information and test dates, visit [SAT resources](#).

As of 2021 College Board will no longer offer the optional essay or subject area tests as part of the SAT. Students should check the specific college requirements to determine if the SAT is required for admittance.



The Academy of Information Technology & Engineering (AITE) is an inter-district, college-preparatory magnet high school with a STEAM focus. With high academic standards and rigorous graduation requirements, students take 4 credits of English, math, science, social studies, and world language. Seniors are also required to complete a capstone project and submit documentation verifying a minimum of 50 hours of community service. In addition to college preparatory academics requirements, students can choose electives from five areas of concentration, dual-credit college courses, and Virtual High School online courses.

Information Technologies Concentration

This concentration consists of courses that enable students to develop advanced computer skills to use in an IT related field or to use technology as a tool in a broad variety of other fields. In addition to regular academic courses, students following this area of concentration will take required courses to expose them to the basics of computer systems and programs, and then follow with a series of professional level courses in their own areas of interest.

Career and Technical Education (CTE) Concentration

Career and Technical Education (CTE) provides students of all ages with the academic, technical skills, knowledge and training necessary to succeed in future careers and to become lifelong learners. CTE encompasses a wide range of activities to provide students with skills demanded in the labor market while preparing them for post-secondary degrees. Activities include not only hands-on learning, specific career-oriented classes, but also internships and in-school programs designed to foster work readiness skills. Today's rigorous and relevant CTE courses prepare students for a wide range of high-wage, high-skill, and in-demand careers.

Architectural & Engineering Concentration

Students in the nationally renowned Project Lead the Way (PLTW) engineering program take specialized courses offered over four years where they engage in real-world challenges that help them become better critical thinkers, collaborators, communicators and problem solvers. Students who successfully complete these courses may be eligible to earn college credit.

Business Concentration

The courses in this concentration help students gain the skills, attitudes and competencies to be successful in post-secondary study, the workforce, and as adult consumers. Students will learn

about various aspects of finance, marketing, management, entrepreneurship, accounting, and business technology. AITE's business concentration aligns with our Vision of the Graduate profile as it helps students prepare to become responsible citizens of a global society, who are capable of making intelligent economic decisions that will benefit their personal and professional lives after graduation.

Cisco Networking Academy

The courses in this program provide students with the skills needed to succeed in networking-related degree programs and help them prepare for CCNA certification. (<http://cisco.netacad.net>)

Digital Arts – Music and Visual Concentration

Students who take courses in this concentration learn skills through hands-on projects, digital applications utilizing current music and graphic arts software, and traditional practices. Students also are provided with opportunities to present their work to various audiences through performances and competitions.

Biomedical Sciences Concentration

Students in the Project Lead the Way Biomedical program take a sequence of four, full-year courses: Principles of the Biomedical Sciences, Human Body Systems, Medical Interventions, and a capstone course entitled Biomedical Innovations. These courses are weighted at the “Honors” level. Students also take 4 additional science courses concurrently and may elect to take additional science courses. This is an exceptional program for students who are interested in exploring post-secondary options in the fields of health sciences or medicine.

Virtual High School

Online courses through Virtual High School are offered to juniors and seniors who have demonstrated the ability to work independently and meet deadlines. This online platform helps to expand the course offerings at AITE. Parents and students are required to sign a contract of expectations and course requirements. For more information about this program students can contact their school counselor. For the complete catalog of courses offered by VHS, please visit vhslearning.org

COLLEGE CREDIT

Students may take college-level courses offered by the University of Connecticut, University of Bridgeport, University of New Haven, and CT State Norwalk which provide dual enrollment credit (high school and college), and enable students to save money on college tuition. Many of these courses are taught by AITE teachers on our campus.

CT State Norwalk/AITE College Credit Partnership

Any AITE junior or senior with a “B” average may be eligible to take an CT State Norwalk course in any field during the fall or spring semesters through the High School Partnership (HSP) program.

Students must be recommended by their school counselor and take the Accuplacer test in the preceding semester to determine eligibility. Students who are eligible for HSP pay no CT State Norwalk tuition. Interested students should contact their school counselor.

University of Connecticut’s Early College Experience (UConn ECE)

The UConn ECE program provides academically motivated students with the opportunity to take university courses while in high school. Students may earn college credit for each UConn ECE course taken. Successful completion of a UConn ECE course adds .07 weighted credit to a student’s rank and GPA. These challenging courses allow students to preview college work, build confidence in their readiness for college, and earn college credits that provide both an academic and a financial head-start on a college degree and other post-secondary opportunities. College credit is earned for a fraction of the cost it would be if the course were taken on a UConn campus.

UConn ECE courses are taught by high school teachers who become certified as adjunct professors by the University. UConn ECE faculty foster independent learning, creativity, and critical thinking – all important for success in college and careers. UConn ECE courses are offered in English, Math, Social Studies, World Language, and Science. To support rigorous learning, University of Connecticut databases are available to all UConn ECE students.

UConn credits are transferable to many colleges and universities. Students are charged a program fee of \$50 per credit plus a resource fee of \$20. Thus, a 2-credit course will cost \$100 and a 3-credit course will cost \$150. For additional information, visit www.ece.uconn.edu.

ACADEMY OF INFORMATION TECHNOLOGY & ENGINEERING REQUIREMENTS FOR AN AITE DIPLOMA

All students are encouraged to meet and exceed the graduation requirements as established by the State of Connecticut and the Stamford Board of Education. As a college preparatory high school, AITE believes that it is in the best interest of every student to pursue a rigorous high school education. We recommend and encourage all students to exceed the required minimum 25 credits to include successful completion of four-year sequences in English, social studies, mathematics,

science, a world language, as well as those additional courses required by the State of Connecticut and the Stamford Board of Education.

CT Graduation Requirements	25 Credits
Humanities	9.0 credits, including fine arts and civics (English, social studies, electives in ELA, ss, art or music); 0.5 credits is required in civics
STEM	9.0 science, technology, engineering, math
Other	1.0 credit of physical fitness and wellness; 1.0 credit of health; 1.0 credit of a world language; 1.0 credit of diploma mastery assessment; 3.0 elective credits

Unique and significant areas required for graduation from AITE include the completion of a CAPSTONE PROJECT and COMMUNITY SERVICE.

CAPSTONE PROJECT: AITE students are required to assess themselves using AITE’s Vision of the Graduate (VoG) rubric, complete a reflection paper, and prepare a defense/presentation using artifacts throughout their high school career that support their ratings on the various VoG indicators.

COMMUNITY SERVICE: AITE students are required to complete 12.5 hours of community service per year. Community service gives students an opportunity to serve the local or global community in a positive way. It also fosters responsibility, understanding, and leadership in our students. Students are encouraged to volunteer at local non-profit organizations in and around the lower Fairfield County area. Students can volunteer through our after school community service club, Interact. Students can also consult their school counselors for help finding community service opportunities. Proof of volunteer hours is required. Forms can be found on the school’s website under the “Student Resources” tab.

The following pages contain all the 2024-2025 school year course offerings.

All courses will run next year based upon student requests. We may not run the course if a course is not at 80% capacity.



Natalia Sierra Vettorazzi

ARCHITECTURE AND ENGINEERING

The Architecture and Engineering courses listed in this section are part of the nationally accredited **PROJECT LEAD THE WAY (PLTW) Program**. The courses in this program are designed to introduce students to the fields of architecture and engineering and to help them develop problem-solving skills, as they collaborate to come up with solutions to real world challenges. Students will also explore the various career pathways in this field. Students, who successfully complete the requirements for these courses, are eligible to earn college credit from the University of New Haven and other universities.

****All courses will run next year based upon student requests. We may not run the course if a course is not at 80% capacity.**

Course Offerings

Engineering Essentials (PLTW) Introduction to Engineering Design (PLTW) Digital Electronics (PLTW)	Civil Engineering and Architecture (PLTW) Principles of Engineering (PLTW) PLTW Capstone (PLTW)
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1500_ENGINEERING ESSENTIALS (PLTW)

Credit(s) 1	Engineering Essentials is a full-year course designed to be a high school student's first exposure to the PLTW Engineering program. In Engineering Essentials, students explore the work of engineers and their role in the design and development of solutions to real-world problems. The course introduces students to engineering concepts that are applicable across multiple engineering disciplines and empowers them to build technical skills through the use of a variety of engineering tools, such as geographic information systems (GIS), 3-D solid modeling software, and prototyping equipment. Students learn and apply the engineering design process to develop mechanical, electronic, process, and logistical solutions to relevant problems across a variety of industry sectors, including health care, public service, and product development and manufacturing.
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1501_INTRODUCTION TO ENGINEERING DESIGN (PLTW)

Prerequisite: Introduction to Engineering Design and Integrated Math I

Credit(s) 1

Introduction to Engineering Design (IED) is a high school level course that is appropriate for students who are interested in design and engineering. Students will employ engineering and scientific concepts in the solution of engineering design problems. In addition, students use the Autodesk 3D solid modeling design software to help them design solutions to solve proposed problems. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges that increase in difficulty throughout the course. Students will also learn how to document their work, and communicate their solutions to their peers and members of the professional community.

1510_DIGITAL ELECTRONICS (PLTW)

Prerequisite: Introduction to Engineering Design and Integrated Math II

Credit(s) 1

Digital Electronics (DE) is a high school level course that is appropriate for students interested in exploring electronics. The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation. Utilizing the activity-project-problem-based (APB) teaching and learning pedagogy, students will analyze, design, and build digital electronic circuits. While implementing these designs, students will continually hone their professional skills, creative abilities, and understanding of the circuit design process.



Angela Chavez

1520_PRINCIPLES OF ENGINEERING (PLTW)

Prerequisite: Introduction to Engineering Design

Credit(s) 1	Principles of Engineering is a broad-based survey course designed to help students understand the field of engineering, engineering technology and its career possibilities. Students will develop engineering problem solving skills that are involved in post-secondary education programs and engineering careers. They will explore various engineering systems and manufacturing processes. They will also learn how engineers address concerns about the social and political consequences of technological change. The main purpose of this course is to experience through theory and hands-on problem solving activities what engineering is all about and to answer the question, "Is a career in engineering or engineering technology for me?"
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1440_CIVIL ENGINEERING AND ARCHITECTURE (PLTW)

Prerequisite: Introduction to Engineering Design

Credit(s) 1	Students will explore aspects of civil engineering and architecture through project development. Topics will include site selection and project planning, surveying, project plan layout, permits and licenses, building design and codes, building systems, and cost analysis. Students will work with cutting-edge technology applications, make site visits, and work with professionals from the field.
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2372_PLTW Capstone

Prerequisites: Successful completion of 2 or more PLTW courses

Credit(s) 1	PLTW Capstone is a capstone course for students who are completing any of PLTW's high school programs. It is an open-ended research course in which students work in teams to design and develop an original solution to a well-defined and justified open-ended problem. Teams draw on the knowledge, skills, and interests of each member, as they perform research to select, define, and justify a problem. Given this collaboration, team members leave the course with a broadened skillset and an appreciation for learning from their peers. After carefully defining the design requirements and creating multiple solution approaches, student teams select an approach, create, and test or model their solution prototype. As they progress through the problem-solving process, students work closely with teachers and continually hone various skills and abilities. At the conclusion of the course, teams present and defend their original solution to an outside panel.
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CAREER & TECHNICAL EDUCATION - BUSINESS

The Business program is designed to develop problem-solving skills for everyday life, to identify goals, to analyze methods of achieving those goals, and to assist students in making informed career choices. These courses are not only valuable preparation for those students who are planning for a career in business but also for those interested in other career paths. The business methods and skills taught will be useful to students entering the business field immediately after graduation, as well as to those planning to attend college or a business school.

****All courses will run next year based upon student requests. We may not run the course if a course is not at 80% capacity.**

Course Offerings

Accounting 1 Accounting 1 honors Accounting 2 Entrepreneurship Entrepreneurship honors Introduction to Business	Marketing Marketing honors Personal Finance Introduction to Sports and Entertainment Marketing and Management 1 Sports and Entertainment Marketing & Management 2 Virtual High School Yearbook
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2170_ACCOUNTING 1 2171_ACCOUNTING 1 HONORS

Prerequisite: Introduction to Business

Credit(s) 1	This course introduces students to a range of accounting knowledge and skills. Students will examine the need for financial information, the role of accounting, the nature of internal accounting controls, and the importance of shortand long-term financial management within a business. They also determine the effects of transactions on the accounting equation, become familiar with steps of the accounting cycle, calculate payroll, process accounts receivable and payable, account for long-term assets, and prepare financial statements. In addition, financial regulations, accounting standards, ethical decision-making, and technology are emphasized throughout the course.
Grade: 10, 11, 12	

2270_ACCOUNTING 2

Prerequisite: Accounting 1

Credit(s) 1

Grade: 11, 12

Principles of Accounting introduces students to a range of accounting knowledge and skills. Students will examine the need for financial information, the role of accounting, the nature of internal accounting controls, and the importance of short and long-term financial management within a business. They will also determine the effects of transactions on the accounting equation, become familiar with steps of the accounting cycle, calculate payroll, process accounts receivable and payable, account for long-term assets, and prepare financial statements. Students will also learn about financial regulations, accounting standards, ethical decision-making, and business technology throughout the course.

2080_ENTREPRENEURSHIP 2081_ENTREPRENEURSHIP HONORS

Prerequisite: Introduction to Business

Credit(s) 1

Students in this course will be introduced to entrepreneurial concepts such as business opportunity recognition, market research, estimating start-up costs, financing and operating a business. Students will also learn business etiquette and hone their oral communication and presentation skills. Each student will be required to write a complete business plan and create a multimedia presentation using PowerPoint. Students will compete in school and in county/regional competition to determine the best business plans and concepts. Students may earn college credit through the University of Bridgeport upon successful completion of this course.

2350_INTRODUCTION TO BUSINESS

Credit(s) 0.5

Introduction to Business is a broad-based introductory course designed to give students exploratory experiences as they relate to the world of business. Students in this course will develop a business vocabulary and will explore all aspects of business through problem-solving, role-playing, critical thinking, and the development of projects and activities. Students will also learn strategies that will assist them as they develop into responsible citizens, wage earners and consumers.

2180_MARKETING
2181_MARKETING CENTURY HONORS

Prerequisite: Introduction to Business

NOTE: Sacred Heart University credit (3 credits) will be offered to students who achieve a grade of B or better.

Credit(s) 1	<p>This course provides an understanding of the business world and development of the student’s knowledge and ability in the marketing field. Marketing introduces the students to the processes and strategies involved in transferring business products or services to a consumer. Through interactive discussions and projects, the course’s main focus is on analyzing the marketing mix, their interrelationships, and how they are used in the marketing process. Topics include: customer behavior, product policy, channels of distribution, advertising and promotion, price policy, marketing programs and the legal aspects of marketing. Students will recognize the customer-oriented nature of marketing and analyze the impact of marketing activities on the individual, business, and society.</p>
Grade: 10, 11, 12	

2361_PERSONAL FINANCE

Prerequisite: Introduction to Business

Credit(s) 0.5	<p>Students in this course will develop an understanding of concepts in areas such as money management, budgeting, financial goal attainment, the wise use of credit, insurance, investments, and consumer rights and responsibilities. Throughout the course, students also examine contemporary, real-world ethical dilemmas that individuals commonly encounter when managing their personal finances. The goal of the Personal Finance course is to help students become financially responsible, conscientious members of society.</p>

2354_INTRODUCTION TO SPORTS & ENTERTAINMENT MARKETING & MANAGEMENT 1

Credit(s) 0.5 (1/2 Year Course - Fall)	<p>This course covers the foundations of consumer behavior as it relates to the sports and entertainment industries. Students will learn the integration of product and services with pricing, promotion and distribution. Additionally, they will learn the importance of marketing concepts in the sports and entertainment industries and how to identify and address the needs of target markets.</p>

2355_ SPORTS & ENTERTAINMENT MARKETING & MANAGEMENT 2

Prerequisite: Introduction to Sports and Entertainment Marketing and Management 1

Credit(s) 0.5
(1/2 Year Course -
Spring)

Students will learn how to design and implement business and marketing plans based on the marketing concepts studied in Introduction to Sports and Entertainment Marketing and Management. Students will also use business simulations to gain a deeper understanding of business decisions and impacts related to these industries. Finally, students will conduct an analysis of the management of leagues, teams, events, corporations and manufacturers in the industry. The role of ethics in sports and entertainment is also addressed.



Ashley Rocano Gomez

1990_VIRTUAL HIGH SCHOOL

Prerequisite: Permission of VHS Coordinator

Credit(s) 0.5; 1

Virtual High School is an online platform, which allows students to take classes online. VHS classes are offered in an asynchronous mode, which follows a college semester schedule; assignments are due at specified weekly intervals. Students may choose up to two semester courses (fall and spring) or one full year course. All VHS courses are monitored regularly and adhere to the National Education Association's recommended course guidelines. For more information, and for the complete catalog of courses offered by VHS, please visit vhslearning.org

0690_YEARBOOK

Prerequisite: Adobe Photoshop or Illustrator

Credit(s) 1

In this course students will gain skills in page design, advanced publishing techniques, copywriting, editing, journalism and photography while producing a creative, innovative yearbook which records school memories and events. Participants will also gain useful, real-world skills in time management, marketing, teamwork, and design principles.

Grade: 12



Cameron Carvalho

CAREER & TECHNICAL EDUCATION - TECHNOLOGY

The Technology program provides students with an opportunity to participate in many well-organized career and/or vocational experiences. In these courses, the fundamental skills of reading, writing, and mathematics are applied to creative projects, and the students learn by doing. Students have the opportunity to obtain 16 college credits at CT State Norwalk if they successfully complete Cisco Networking Academy courses. These CT State Norwalk credits may be used toward satisfaction of the graduation requirements for an Associate Degree at CT State Norwalk or will be eligible toward completion of a 4-year Bachelor of Science Degree at Western Connecticut State University under the terms of the CT State Norwalk/WCSU articulation agreement.

****All courses will run next year based upon student requests. We may not run the course if a course is not at 80% capacity.**

Course Offerings

Cisco Networking Academy: Introduction to Networks Scaling Networks Connecting Networks Cybersecurity (PLTW) eSports eSports honors Introduction to Game Design Game Design and Development	AP Computer Science A AP Computer Science Principles (PLTW) Introduction to Computer Science Computer Programming (CT State Norwalk Partnership) Introduction to Networking Internet of Things: Connecting Things Studio Production 1 Studio Production 2
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2721_CCNA ROUTING AND SWITCHING: INTRODUCTION TO NETWORKS

Credit(s) 1	This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.
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2751_ CCNA ROUTING AND SWITCHING: SCALING NETWORKS

Credit(s) 1

This course describes the architecture, components, and operations of routers and switches in a large and complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network.

2791_ CCNA ROUTING AND SWITCHING: CONNECTING NETWORKS

Credit(s) 1

This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students also develop the knowledge and skills needed to implement IPsec and virtual private network (VPN) operations in a complex network.

2511_ CYBERSECURITY (PLTW)

Credit(s) 1

Grades 10, 11, 12

PLTW Cybersecurity is a full-year course implemented in 10th grade or above. The design of the course exposes high school students to the ever growing and far reaching field of cybersecurity. Students accomplish this through problem-based learning, where students role-play as cybersecurity experts and train as cybersecurity experts do. PLTW Cybersecurity strongly connects to the National Cybersecurity Workforce Framework (also known as the NICE Framework or NCWF). Created by the National Institute of Standards and Technology (NIST), this framework identifies standards developed by numerous academic, industry, and government organizations.

2356_ ESPORTS

2356_ ESPORTS HONORS

Prerequisite: Introduction to Game Design and Game Design and Development

Note: University of Bridgeport credit (3 credits) will be offered to students who meet the criteria.

Credit(s) 1

Students in this course will be introduced to the fundamental concepts of today's Esports industry and bringing games to market. Students will learn about best practices through Esports case studies, articles, and videos. Students will explore the financial, legal and ethical, marketing, and operational issues surrounding the Esports and gaming industries will be studied at length. Students will use the skills they learned in earlier Game Design classes to learn the process of bringing a game to market. Students also will explore career opportunities and execute tournaments throughout the year in conjunction with the AITE's Esports Club.

2473_ INTRODUCTION TO GAME DESIGN

Credit(s) 0.5

(½ Year Course – Fall)

The course introduces students to the history, structure, creation and developmental strategy of game development. The history, player, and game elements will be examined, as well as the overall creation of the game from storytelling, characters, game play, levels, interface, and audio content. The developmental strategy will focus on the roles and responsibilities, production and management, and marketing and maintenance of game development.

2472_ GAME DESIGN AND DEVELOPMENT

Prerequisites: Introduction to Game Design

Credit(s) 0.5

(½ Year Course – Spring)

This course takes the students on a creative journey that starts at a conceptual beginning and arrives at a polished end – the game prototype. Students will produce storyboards, categorize interfaces, control schemes, manage game assets and script interactive elements to produce a game prototype.

Grade: 10, 11, 12

6645 _AP COMPUTER SCIENCE PRINCIPLES (PLTW)

Prerequisite: Introduction to Computer Science

Credit(s) 1

This course helps students to develop computer programming expertise and explore the workings of the Internet. Projects include APP development, visualization of data, cybersecurity, and simulation.

6640 _AP COMPUTER SCIENCE A

Prerequisites: Introduction to Computer Science or AP Computer Science Principles

Credit(s) 1

Students in this course will learn about fundamental computer science topics, which include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design. These techniques represent proven approaches for development solutions, which can be scaled up from small, simple problems to large, complex problems.



Carmindy Herrman

2688_INTRODUCTION TO COMPUTER SCIENCE

Credit(s) 1

This is an introductory course for students new to programming and computer science. Students will learn problem solving strategies, software design, and the foundations of computer science. Students will learn to code using the Python language and eventually create their own programs. This course will prepare students for AP Computer Science Principles or AP Computer Science A.

6630_COMPUTER PROGRAMMING (CT STATE NORWALK PARTNERSHIP)

Credit(s) 1

Students in this course will be introduced to the world of programming utilizing VisualBasic.NET, a high-level event driven programming language. Students will learn and apply the basic concepts of Visual-Basic to solve problems. More advanced programming concepts, including database programming and object-oriented programming, will also be explored. Students who meet the criteria are eligible to earn dual credit for college.

2217_STUDIO PRODUCTION 1

Credit(s) 1

Topics in this course include production in the media arts and editing, as well as applications in the field of videography. Extensive training in audio, lighting, set design, camerawork, production, and postproduction are emphasized.

Grade: 10, 11, 12

2218_STUDIO PRODUCTION 2

Prerequisite: Studio Production 1

Credit(s) 1

This is a course in all aspects of photography and cinema. Students will be exposed to advanced topics in film production and commercial/editorial photography. Careers and opportunities in the industry will be discussed. Admission by teacher approval only.

Grade: 11, 12

2430_INTRODUCTION TO NETWORKING

Prerequisite: Integrated Math I

Credit(s) 1

This course is designed to introduce students to a more advanced understanding of information technology and data communications. Students will develop the necessary skills to enter this field by building a computer system, installing the operating systems, adding peripherals, connecting the computer to a local area network, and to the Internet. Characteristics of the Linux, Windows 2000, NT and XP Network operating systems will be discussed. Students will explore a variety of topics including installation procedures, security issues, back-up procedures, and remote access. This is a hands-on, lab-oriented course that stresses lab safety and working effectively in a group environment. This course will help prepare students for CompTIA's A+ certification.

2771 INTERNET OF THINGS: CONNECTING THINGS

Recommended for students who want to take CCNA courses

Credit(s) 0.5

This is the first course of three in the Cisco Networking Academy's IoT Fundamentals. The curriculum provides students with a comprehensive understanding of the Internet of Things (IoT). It develops foundational skills using hands-on lab activities that stimulate students in applying creative problem-solving and rapid prototyping in the interdisciplinary domain of electronics, networking, security, data analytics, and business. The student-centric approach translates into the student being able to ideate, design, prototype and present an IoT solution for an identified business or society need.



Mia Chacon Grade 12

ENGLISH

The four-year English program is designed to provide students with reading, writing and oral skills, to encourage responsible social interaction, enhance the learning process, and generate enthusiasm for the power of language, particularly imaginative language. All students are required to take four years of English. The English curriculum emphasizes skills for college readiness and advanced courses. In order to prepare students for their role in a diverse society, literature encompasses texts from a multitude of cultures

Course Offerings

Requirements:

English 9
 English 9 Honors
 English 10
 English 10 Honors
 English 11
 English 11 Honors
 AP English Language & Composition 11
 English 12
 English 12 honors

English 12 Honors

UConn ECE/AP English Literature & Composition 12

Electives:

Authors of the Eye: Film Theory and Analysis
 Creative Writing 1 & 2
 Web Newspaper

Interventions:

English Lab 9
 Literacy Lab

****All courses will run next year based upon student requests. We may not run the course if a course is not at 80% capacity.**

3010_ENGLISH 9

3000_ENGLISH 9 HONORS

Credit(s) 1

This course is devoted to developing all of the language arts (reading, writing, listening, speaking, viewing, and enacting). The goal of the writing program is the development of fluency, focus, and structure in a variety of genres, including the persuasive, narrative, and expository essays, response to literature, and other modes.

Appropriate attention is paid to editing skills. Literature instruction encourages thoughtful interpretation of various genres including adolescent fiction and mythology, as well as novels, short stories, information, and poetry. Students also participate in thematic Literature Studies units.

3110_ENGLISH 10
3100_ENGLISH 10 HONORS

Credit(s) 1

This course examines the interpretation of literature through the mediums of the short story, the novel, and expository articles. Instruction focuses on written and oral expression including the persuasive essay and literary response with attention to research, editing, and oral expression skills. Students develop interpretive skills and become fluent in written response to literature. Students also participate in thematic literature studies units.

3210_ENGLISH 11
3200_ENGLISH 11 HONORS

Credit(s) 1

This course develops an understanding of the American experience through the study of the novel, biography, drama, essay, and poetry. Attention is given to developing fluent, well-structured, and well-edited written expression as well as formal and informal oral expression. In addition, students gain deepened appreciation of the many cultures that make up and contribute to the American experience. Students also participate in thematic literature studies units.

3260_AP ENGLISH LANGUAGE AND COMPOSITION II

Credit(s) 1

This course primarily focuses on the study of rhetoric and persuasion. Students read and analyze nonfiction selections to identify and explore purposeful choices made by sophisticated writers.

3730_ENGLISH 12
3900_ENGLISH 12 HONORS

Credit(s) 1

This course focuses on a selection of world literature, nonfiction, and film that examines the human condition from multiple perspectives. Students continue to develop analytical skills in a variety of written and oral formats. Students also participate in thematic literature studies units.

3301_UCONN ECE/AP ENGLISH LITERATURE AND COMPOSITION 12

Credit(s) 0.5

This course offers students the opportunity to participate in an intensive program intended to prepare students both for the Advanced Placement test and for the rigors of college English. Critical analysis of literature, advanced levels of academic writing, intensive group discussion, projects, occasional creative writing, the personal narrative essay, and critical reading form the core of the course. Successful scores of 4 or 5 on the Advanced Placement test often excuse the student from a semester of freshman level English at participating colleges.

3791_ENGLISH LAB 9

Credit(s) 0.5

This course is designed to provide freshmen with additional support with literacy skills. During English Lab, students develop comprehension skills through direct instruction, software, and individual practice. Course enrollment is determined by grades, assessment data, and referral.

3792_ LITERACY LAB

Credit(s) 0.5

This course is for students who need additional time and support with literacy skills. Course enrollment is determined by grades, assessment data, and referral.

3920_WEB NEWSPAPER 1

3921_WEB NEWSPAPER 2

Credit(s) 1

Students will learn different formats of journalistic writing including, but not limited to, news, features, columns, editorials, and sports. Students will plan, draft, and complete written assignments on a regular basis and under deadline constraints, using the correct conventions and mechanics of written English. Students will participate in the publication of the online school newspaper.

3361_CREATIVE WRITING 1

Credit(s) 0.5

This course requires students to demonstrate an ability to write in a creative manner in a variety of literary formats that include the short story, novellas, plays, and poetry. Group reading of works in progress is expected and revision based on peer critique is required.

3590_CREATIVE WRITING 2

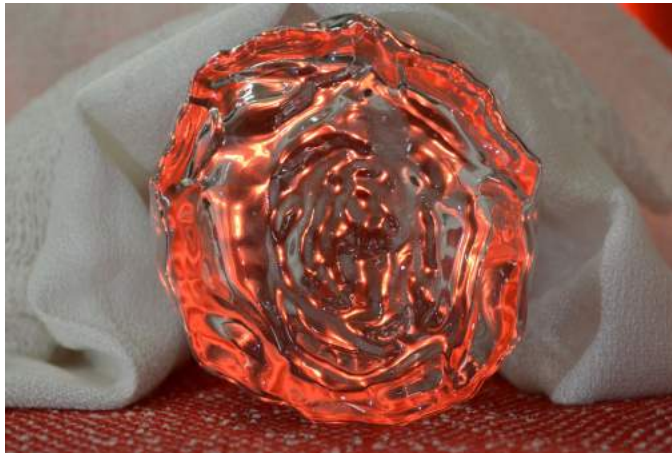
Credit(s) 0.5

Students in this course will continue to write in a variety of literary formats to include the short story, drama, and poetry. Group reading of works in progress is expected and revision based on peer critique is required. Students will analyze the writing of established writers to demonstrate their understanding of the creative process and learn to discover their own creative voices. The goal of the advanced student is to strive for publication.

3324_ AUTHORS OF THE EYE: FILM THEORY AND ANALYSIS

Credit(s) 0.5

Students in this course will analyze themes, motifs, and symbols that present themselves in modern-day films. Using a Socratic seminar discussion format, students will also engage in analytical discussions and will be expected to write comprehensive essays about various films.



Jocelyn Zhang

VISUAL AND PERFORMING ARTS – VISUAL

In Visual Arts, a wide range of coursework is designed to develop an understanding of art, art production, art history, creative problem solving, and technical applications. Art courses may be used for personal satisfaction as well as for acceptance to advanced schools, college, or computer arts careers.

Course Offerings

Drawing 1 Painting 1 Drawing and Painting 2 Introduction to Animation 1 Introduction to Animation 2 Advanced Animation Adobe Photoshop Adobe Illustrator	Digital Photography 1 Digital Photography 2 Multimedia Presentation Studio Art Architectural Drafting/CAD Technology Interactive Art Robotics
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****All courses will run next year based upon student requests. We may not run the course if a course is not at 80% capacity.**

0153_DRAWING 1

Credit(s) 0.5 (1/2-Year Course – Fall)	This course introduces the students to the basic aspects of drawing. It is recommended as a foundation course for all fine art classes. Students will draw with a variety of media, such as a pencil, charcoal, and ink in black and white as well as color. They will also learn the fundamentals of two-dimensional design. Class assignments will incorporate art history with projects designed to foster conceptual as well as technical understanding. There will also be computer-generated projects using the tablets.

0154_PAINTING 1

Credit(s) 0.5 (1/2-Year Course – Fall)	This course introduces the students to the basic aspects of painting. It is recommended that the student has taken Drawing 1. Students will paint with a variety of media, such as tempura, watercolors, and acrylics. They will also learn the fundamentals of two-dimensional design. Class assignments will incorporate art history with projects designed to foster conceptual as well as technical understanding. There will also be computer-generated projects using the tablets.

0250_DRAWING AND PAINTING 2

Prerequisite: Drawing 1 or Painting 1 or Art Department approval

Credit(s) 1

Students in this course will develop an ability to interpret and produce three-dimensional objects through use of elements of art such as line, form, and color. Still life structural representation, nature study, rendering, and portraiture will be investigated. Students will study color in depth through the use of pencil, chalk, watercolor and paint. Students will also study the history of art in detail, as well as contemporary movements. Critiques and the objective development of student work are emphasized.

0821_ INTRODUCTION TO ANIMATION 1

Credit(s) .5

Students in this course will explore the illusion of movement and the development of animation through time. Students will engage in brainstorming, writing, storyboarding and creating animations using a traditional hands-on approach and a computer generated one. Students must be willing to draw on paper and write. Students in this class will use Adobe Animate for most digital projects.

0822_ INTRODUCTION TO ANIMATION

Prerequisite: *Intro. To Animation Part 1*

Credit(s) .5

Students in this course will continue to explore computer generated animation. Students will engage in brainstorming, writing, storyboarding. Students must be willing to draw on paper and write. This class uses Adobe Animate for most digital projects.

0830_ADVANCED ANIMATION

Prerequisite: Introduction to Animation 1 and 2

Credit(s) 1

This course continues the exploration of the illusion of movement. Students will work to build their animation skills while exploring a variety of animation techniques. (e.g.,: rotoscoping, information animations and stop motion) Students in this class will use Adobe Animate and After Effects for most projects.

0720_ADOBE ILLUSTRATOR

Credit(s) 0.5

This course is a foundation course for students who are beginning their study of the digital arts. Students in this course will explore fundamental elements and principles of design using Adobe Illustrator. Students also will learn about the tools and techniques of drawing on the computer.

0740_ADOBE PHOTOSHOP

Credit(s) 0.5

(1/2-Year Course –
Fall)

This course is intended for the beginner digital arts student as an exploration of the elements and principles of design using Adobe Photoshop. The student will learn about the tools and techniques of photo-manipulation and the fundamentals of design. It is a foundation course for further art courses.

0840_MULTIMEDIA PRESENTATION

Prerequisite: Adobe Photoshop

Credit(s) 1

Students will explore different ways to communicate creative ideas while utilizing a variety of digital technologies, such as:

- Image editing (Photoshop)
- Digital video (Final Cut Pro, Premiere & After Effects)
- Animation (After Effects & Animate)
- Web Design (Dreamweaver)

0191_DIGITAL PHOTOGRAPHY 1

Credit(s) 0.5

(1/2-Year Course –
Fall)

Students explore photography using digital cameras. Through a variety of assignments, students incorporate the elements and principles of art and design, aesthetics, history, and philosophy of photography. Ownership of a digital camera recommended; cell phones acceptable.

0205_DIGITAL PHOTOGRAPHY 2

Prerequisite: Digital Photography 1

Credit(s) 0.5

(1/2-Year Course –
Fall)

In this course students will refine their digital photography skills through learning how to master functions on their cameras, learning how to enhance their vision by using natural and artificial light, and learning how to use strobes, reflectors, and umbrellas to create an environment for taking photographs for fashion modeling, still life sets, and experimental lighting. Students will also learn how to create advanced photographic imagery for their portfolios.

0400_STUDIO ART

Prerequisite: Drawing and Painting 2 and/or department permission

Credit(s) 1

This course is designed for the highly motivated student committed to a career in art. Students will work as a group and on developing an individual portfolio and may be required to spend additional extra time beyond class time to complete their projects. Students will use a variety of media from markers to charcoal, oil paint, acrylics, digital cameras (still and motion), and computer programs such as the Adobe suite. Each portfolio will vary according to the students' interests and talents and the particular requirements of the institution to which it is being submitted.

1340_ARCHITECTURAL DRAFTING/ CAD TECHNOLOGY

Credit(s) 1

This course provides each student an opportunity to learn the different views that accompany drafting. Students will learn that precise measurements, clean drawn lines and legible lettering are important in relaying information. Once students have demonstrated these skills they will learn about house styles, designs, what encompasses each style of house and will research kitchen designs, room sizes, window styles, doors, bathrooms, etc. Each student will complete architectural plans for a single family residence starting with paper and pencil and learn Auto-CAD to complete the remaining floor plans, elevations, detail cross sections and other plans.

1701_INTERACTIVE ART ROBOTICS

Prerequisite: Integrated Math I or higher

Credit(s) 1

Students will be introduced to the different components of robotics through computer programming, creating flow charts, Electronics/ Robotics and Design. With the use of C++ students learn programming methodology and how to structure, and write and problem solve simple and sophisticated programs. The Electronics/ Robotics section encompasses: Fundamentals of electronics, Ohm's Law, voltage, current, servos, LEDs, resistors, schematics, micro-processors, I/O controls, and the micro-processor programming language PBASIC.

VISUAL AND PERFORMING ARTS - MUSIC

The music program offers a wide variety of individual and group listening, creating and performing opportunities on an elective basis.

Music provides students with opportunities to participate in a number of performances as a member of a variety of dynamic and active groups.

A broad range of courses provides instruction in instrumental and choral settings, theory, music history, appreciation and contemporary elements of music. These courses will enable students to experience group interaction and to develop a sense of dedication and commitment through music.

****All courses will run next year based upon student requests. We may not run the course if a course is not at 80% capacity.**

Course Offerings

Band
Piano Instruction 1
Piano Instruction 2
Digital Music Production

Digital Music Theory and Composition
Guitar Instruction 1
Guitar Instruction 2

7220_BAND

Prerequisite: Previous study in instrumental music

Credit(s) 1

The purpose of this course is to continue studies in instrumental music. Participating in various concerts during the school year is required. This is a performance-based class requiring participation, performance, and attendance in class and at rehearsals as an integral part of the student's grade.

7700_PIANO INSTRUCTION 1

Credit(s) 0.5 (1/2-Year Course – Fall)

This class is intended for students who have little or no experience on a musical instrument. Students will learn how to read notation for the piano while playing music from various cultures and styles. This is a performance-based class where students will also use computers to aid instruction and evaluation

7710_PIANO INSTRUCTION 2

Prerequisite: Piano Instruction 1 or permission of instructor.

Credit(s) 0.5

(1/2-Year Course –
Fall)

This class is intended for students who have had experience on the piano. The focus of this class is to further the students' abilities on the piano through sight-reading, advanced repertoire and higher level theory work. This is a performance-based class where students will be working alone and in groups. Students will also use computers to aid instruction and evaluation.

1961_DIGITAL MUSIC PRODUCTION

Prerequisite: None

Credit(s) 1

This is a project-based class where students will compose and produce their own music that will be recorded to Mp3. Students will learn a variety of recording and production software that they will use to create their own compositions. Students will also learn the fundamentals of music and the piano.

7630_DIGITAL MUSIC THEORY AND COMPOSITION

Prerequisite: Digital Music, Piano Instruction 1, Guitar 1, or permission of instructor

Credit(s) 1

This is a project-based class that will focus on computer aided music theory and composition. Students will learn a variety of recording and production software that they will use to create and produce their own compositions. Students will also continue with piano instruction.

7720_GUITAR INSTRUCTION 1

Prerequisite: Students must own or rent their own guitar. (An acoustic guitar is recommended; no amplifiers will be allowed.)

Credit(s) 0.5

(1/2-Year Course –
Fall)

This class is intended for students who have little or no experience on a musical instrument. Students will learn the basics of chords, rhythm, and notation for the guitar. This class will focus on the fundamentals of playing the guitar while performing music from various cultures and styles. This is a performance-based class where students will be working alone and in groups.

7730_GUITAR INSTRUCTION 2

Prerequisite: Successful completion of Guitar Instruction 1 or permission of instructor.

Credit(s) 0.5
(1/2-Year Course –
Fall)

Students must own or rent their own guitar. (An acoustic guitar is recommended; no amplifiers will be allowed.) This class is intended for students who have experience on the guitar. The focus of this class is to further the students' abilities on the guitar through sight-reading and performing music from various cultures and styles. This is a performance-based class where students will be working alone and in groups.



Kira Pyrovar

HEALTH AND PHYSICAL EDUCATION

The Health Education Program provides students with a comprehensive study of various aspects of personal health, including fitness, nutrition, disease, first aid, mental health, safety, community health and welfare, and substance use and abuse.

The Physical Education Program provides a comprehensive and sequential progression of learning experiences, which contributes to the total growth and development of students. Students review and refine skills and sport strategies while developing a positive approach to fitness.

****All courses will run next year based upon student requests. We may not run the course if a course is not at 80% capacity.**

Course Offerings

Physical Education 1 & 2

Health 1 & 2
Human Behavior 1 & 2

9310_PHYSICAL EDUCATION 1

Credit(s) 0.5
(1/2 Year Course – Fall)

The physical education program parallels the health program in encouraging students to develop and maintain good fitness for life. All students will participate in a comprehensive Personal Fitness Program, which will include a battery of fitness tests. They will be introduced to team sports such as: soccer, flag football, softball, floor hockey, volleyball, basketball, team handball, and wiffle ball. Individual sports include tennis and badminton.

9900_HEALTH 1

Credit(s) 0.5

This course examines the relationship that exists among physical, emotional, and social health. Students explore the decision making process and learn how their decisions contribute to their personal health and lifelong wellness. Topics emphasized include, but are not limited to, emotional health, nutrition, fitness, substance use and abuse, sexual health, violence prevention, and responding to emergencies.

9910_HEALTH 2

Credit(s) 0.5

This course examines topics covered in Health 1 in greater detail and depth. Students continue to explore the decision making process and learn how their decisions contribute to their personal health and lifelong wellness. Topics emphasized include, but are not limited to, emotional health, nutrition, fitness, substance use and abuse, sexual health, violence prevention, and responding to emergencies.

9160_PHYSICAL EDUCATION 2

Credit(s) 0.5

(1/2 Year Course – Spring)

This physical education program includes the state mandated Physical Fitness Assessment and Substance Abuse unit, weight training, and a choice of team and/or individual sports. Choices include archery, table tennis, tennis, golf, basketball, power volleyball, and slow pitch softball.

9800_HUMAN BEHAVIOR 1

Credit(s) 0.5

Grade: 11, 12

This course examines the principles of human behavior through guided group discussions. Major topics emphasize group behavior, team building, development of a positive self-image, and conflict resolution/mediation. In addition, students explore various forms of self-destructive behavior.

9840_HUMAN BEHAVIOR 2

Credit(s) 0.5

Grade: 11, 12

This course continues to examine the principles of human behavior through guided group discussions. Major topics emphasize gender roles, dating relationships, marriage, family life, human sexuality, pregnancy and death. The course also explores life philosophies in relationship to these topics.



Leilany Botello Rosas

MATHEMATICS

The mathematics department is organized to develop and implement a curriculum that will give every graduate of Stamford Public Schools the knowledge, understanding, and skills they will need in mathematics to compete in the 21st century world economy.

Instruction is varied and includes teacher-centered, group work, inquiry-based, and individual learning. Graphing calculators are used extensively in every course. Some classes also include computer software applications.

Homework is given regularly and is expected to be completed. Tests and quizzes model homework and class-work. Both homework and assessments play a vital role in the teacher evaluation of a student.

****All courses will run next year based upon student requests. We may not run the course if a course is not at 80% capacity.**

Course Offerings

Integrated Math I Integrated Math II Integrated Math II Honors Algebra 2 Algebra 2 Honors Electives: Academic Intervention Mathematics Algebra 3 and Trigonometry AP Statistics Pre-Calculus Pre-Calculus Honors	Calculus honors AP Calculus AB AP Calculus BC AP Computer Science Applied Math: Introduction to Aerospace and Engineering Applied Math Honors: Introduction to Aerospace and Engineering Statistics and Probability Math Lab 1 & 2 Mathematical Modeling
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9744_ACADEMIC INTERVENTION-MATHEMATICS

Credit(s) 0.5

The goal of Academic Intervention is to provide short-term assistance to students who need academic support during the school day. Students are identified for placement through the Scientific Research-based Intervention (SRBI) process. Students will have the opportunity for small group direct instruction from a teacher as well as independent practice. Specific services, supports and goals will be determined on an individual basis by the Student Support Team (SST).

6218_ INTEGRATED MATH I

Credit(s) 1

This course examines the properties of real numbers, linear equations, inequalities, piecewise equations, linear programmings, systems of equations and applications, dimension and measurement, and transformations. Emphasis is on algebraic, geometric, and graphic representation of these topics through critical thinking activities as well as the use of computers and graphic calculator technology. Students focus on problem-solving and real-life applications.

6250_ INTEGRATED MATH II 6240_ INTEGRATED MATH II HONORS

Prerequisite: Integrated Math I

Credit(s) 1

Integrated Math II builds upon the concepts learned in Integrated Math 1, focusing on deepening understanding of polynomials, quadratic functions, geometry, trigonometry, probability concepts. The course is aligned with Common Core State Standards and emphasizes problem-solving skills and real-world applications, fostering a deeper appreciation for the interconnected nature of mathematics. This course offers a rich and engaging learning experience, equipping students with the mathematical foundation and skills necessary for success in subsequent math courses and related fields.

Integrated Math II Honors is a comprehensive course designed to further students' understanding of mathematical concepts while fostering critical thinking, problem-solving skills, and mathematical reasoning. This course is the second installment in the integrated math series, blending algebraic, geometric, and statistical concepts, including polynomials, quadratic functions, similarity, trigonometry, and probability, to provide students with a well-rounded and interconnected approach to mathematics. The course offers challenging and enriching experiences for honors students, preparing them for advanced coursework and providing a solid foundation for future studies in mathematics and related fields.

6200_ALGEBRA 2**6210_ALGEBRA 2 HONORS**

Prerequisite: Integrated Math I/Algebra 1 and Geometry

Credit(s) 1

This course examines the properties of real numbers, linear equations and functions, inequalities, linear systems of equations, quadratic and polynomial functions, rational and radical functions, exponential and logarithmic functions. Emphasis is on algebraic, geometric, and graphic representation of these topics through critical thinking activities, as well as the use of computers and graphic calculator technology. Students focus on problem solving and real life applications throughout the year, as well as skills required for the SAT examination.

6850_ALGEBRA 3 AND TRIGONOMETRY

Prerequisite: Algebra 2

Credit(s) 0.5
(1/2-Year Course –
Fall)

This course is recommended for Junior and Senior students not taking pre-calculus. It is designed to enhance the student's reasoning skills and mathematical understanding. The major concepts of Algebra, Integrated Math II, and Trigonometry will be rigorously revisited to help prepare the student for real world modeling. SAT/ACT preparation is included in the framework of this course. Computer software and graphing calculators will be utilized for instruction.

6360_AP STATISTICS

Prerequisite: Algebra 2

Credit(s) 1

AP Statistics is a full year non-calculus based course that introduces the major concepts and tools for collecting, analyzing, and formulating conclusions from raw data. Students will be exposed to several broad conceptual themes: Data Exploration, Probability, Linear Regression, Statistical Inference, Sampling and Experimental Design. This course is designed to meet the same objectives as a first year Statistics course at a college level. Graphing calculators and/or computer software will be used as an integral part of the study.

6320_PRE-CALCULUS
6330_PRE-CALCULUS HONORS

Prerequisite: Algebra 2

Credit(s) 1

This course examines the properties of functions and modeling, advanced analysis of polynomial, rational exponential and logarithmic functions, trigonometric analysis, polar coordinates and complex numbers. Emphasis is on algebraic, geometric, and graphic representation of these topics through critical thinking activities, as well as the use of computers and graphic calculator technology. Students focus on problem solving and real life applications throughout the year, as well as skills required for the SAT examination.

6340_CALCULUS

Prerequisite: Pre-Calculus

Credit(s) 1

This course examines the advanced properties of functions, including limits and continuity, the techniques of differential and integral calculus. Emphasis is on algebraic, trigonometric, and exponential functions of these topics through critical thinking activities, as well as the use of computers and graphic calculator technology. Students focus on problem solving and real life applications throughout the year.

6290_AP CALCULUS AB

Prerequisite: Pre-Calculus or Pre-Calculus Honors

Credit(s) 1

This intensive college level calculus course examines the advanced properties of functions, limits, and continuity, as well as the techniques of differential and integral calculus. These will be developed and applied to algebraic, trigonometric, and exponential functions. Student experiences focus and emphasize on problem solving and real life applications through critical thinking activities, as well as the use of computers and graphic calculator technology.

6291_AP CALCULUS BC

Prerequisite: Pre-Calculus Honors

Credit(s) 1

This intensive college level calculus course examines the advanced properties of functions, limits, and continuity. Techniques of differential and integral calculus and concepts of sequences and series will be developed and applied to algebraic, trigonometric, exponential parametric and polar functions. Student experiences focus and emphasize on problem solving and real life applications through critical thinking activities as well as the use of computers and graphing calculator technology.

6640_AP COMPUTER SCIENCE

Prerequisite: Algebra 2

Credit(s) 1

This intensive college level Computer Science course examines the advanced properties of data structures, design and algorithm development using Java as the programming language. Student experiences focus on and emphasize problem solving and real life applications through critical thinking activities including the social and ethical implications of computer use.

6680_APPLIED MATH: INTRODUCTION TO AEROSPACE AND ENGINEERING 6681_APPLIED MATH: INTRODUCTION TO AEROSPACE AND ENGINEERING HONORS

Prerequisite: Algebra 1

Credit(s) 1

This is a mathematically intensive hands-on course in which students learn to model physical systems using Algebra, Integrated Math II, and Trigonometry in the domains of ballistics, aerodynamics, and electricity. Students will test their mathematical models by building and operating model rockets, ground support systems, and airplanes equipped with cameras, altimeters, and accelerometers, and analyzing flight data. The prerequisite is Integrated Math I and students will be expected to work independently with minimal direction as they discover solutions to open-ended real world engineering problems from NASA and industry.

6860_STATISTICS AND PROBABILITY

Prerequisite: Algebra 3

Credit(s) 0.5

(1/2-Year Course –
Fall)

This course will utilize a creative and research based learning format, providing opportunities for real world critical thinking and deduction skills. Students will use a hands-on approach to explore applications in Science, Sports, Business, Social/Political Sciences, and Engineering. Students will develop research and data analysis skills across disciplines within a technology rich environment through the integration of Excel, graphic calculator, and Internet resources.

6901_MATH LAB 1

Credit(s) 0.5

This course is designed to assist students with various areas of growth in mathematics to ensure their success in high school algebra. During Math Lab, students develop math skills through direct instruction, software, and individual practice. Course enrollment is determined by grades, assessment data, and referral.

6902_MATH LAB 2

Credit(s) 0.5

This course is for students who need additional time and support with math concepts and skills. Course enrollment is determined by grades, assessment data, and referral.

6359_MATHEMATICAL MODELING

Credit(s) 1

This course invites students to use math to create and manipulate models of real-world situations and things of interest to them. Students will use mathematical rigor to make models in the form of graphs, schematic drawings, equations and objects. The models will then be used for problem solving, critical evaluation of numerical information, decision making, and economics in real-world applications. Building and using models will develop and leverage skills including numeracy, ratio and proportional reasoning, algebra and statistics. In this way, students will experience the usefulness of the math they've learned, and improve their abilities as they do so.



Liliana Cardenas Fernandez

SCIENCE

We live in a world that is dominated by the influence of science and technology. The ability to make informed decisions as voters and consumers requires an understanding and appreciation of the nature of science. Since science is both a body of knowledge and a process of investigation, these two components are an integral part of each science course offering. Students should expect a rigorous course of study that encourages higher-level reasoning, incorporates the use of technology, and involves laboratory inquiry. Skills in reading, writing, and mathematics are an important component of science instruction. Science courses are carefully aligned with the National Standard of Science Education and the Connecticut Science Frameworks and develop appropriate skills for the SAT. All students are encouraged to take four years of science including a balance of the life sciences and the physical sciences.

****All courses will run next year based upon student requests. We may not run the course if a course is not at 80% capacity.**

Course Offerings

Biology	Environmental Biology
Biology honors	UConn ECE/AP Environmental Science
AP Biology	Marine Biology
Chemistry	Forensic Science
Chemistry honors	Forensic Science honors
AP Chemistry	Human Physiology
Conceptual Physics	Human Physiology honors
Conceptual Physics honors	Principles of Biomedical Science (PLTW)
Physics	Human Body Systems (PLTW)
Physics honors	Medical Interventions (PLTW)
AP Physics 1	PLTW Capstone
AP Physics 2	Science Research
UConn ECE Physics 1201Q	
UConn ECE Physics 1202Q	

8110_BIOLOGY
8120_BIOLOGY HONORS

Credit(s) 1

The course is the continuation of the Physics First format of instruction at AITE. Building on the skills and NGSS concepts learned in Conceptual Physics and Chemistry, this course explores biological principles in a comprehensive, evolutionary approach to explore the diversity of the living world. The course examines: chemistry of life, cell biology, genetics, evolution, and classification (including microorganisms, fungi, plants, invertebrates, and vertebrates). Students' understanding of biology is fostered through laboratory investigations, problem solving, and critical thinking activities. Laboratory investigations, emphasizing data analysis, questioning, argumentation, and inquiry, are an integral part of this course.

8360_AP BIOLOGY

Prerequisite: Biology, Chemistry, and two years of mathematics

Credit(s) 1

This course is planned to meet the objectives of a rigorous course in first year biology at the college level. Topics will include: molecules and cells, heredity and evolution, organisms and populations, biotechnology and genetics. Laboratory investigations are an integral part of this course. Each student should complete a lab notebook or portfolio of lab reports.

8210_CHEMISTRY
8280_CHEMISTRY HONORS

Credit(s) 1

This course is the continuation of the Physics First format of instruction at AITE. Building on the skills and NGSS concepts learned in Conceptual Physics, this course examines: atomic structure, periodicity, ionic and covalent bonding, chemical equations, stoichiometry, solutions, reaction rates, chemical equilibrium, acids and bases, oxidation and reduction, electrochemistry, and hydrocarbons and functional groups.

8420_AP CHEMISTRY

Prerequisite: Two years of laboratory science including Chemistry (Honors Chemistry is recommended) and two years of mathematics

Credit(s) 1

This course is designed to meet the objectives of a rigorous course in first year chemistry at the college level. Topics include: the structure of matter, kinetic theory of gasses, chemical equilibrium, chemical kinetics, and the basic concepts of thermodynamics. Each student completes a lab notebook or portfolio of lab reports. Laboratory investigations are an integral part of this course.

8320_CONCEPTUAL PHYSICS
8321_CONCEPTUAL PHYSICS HONORS

Credit(s) 1

This course introduces students to scientific tools and methods and provides an introduction to physics. Topics covered include measurement conversion, model creation, use of scientific methods, interpretation of atoms, identification of the properties of common compounds, the impact of force on linear motion, and the study of various physical phenomena and forms of energy. This NGSS aligned freshman course prepares students to take Chemistry in sophomore year followed by Biology in junior year.

8310_PHYSICS
8400_PHYSICS HONORS

Prerequisite: Algebra 2 (or concurrent enrollment) and two years of high school science

Credit(s) 1

This course explores classical and modern physics principles in a comprehensive approach. The course examines: Newtonian mechanics, heat, kinetic theory and thermo-dynamics, electricity and magnetism, waves and optics, historical astronomy, and nuclear physics. Students' understanding of physics is fostered through laboratory investigations, problem solving, and critical thinking active-ties. Laboratory investigations are an integral part of this course. As a result of this course, students develop a deeper understanding of physics and its related applications.

8384_AP PHYSICS 1

Prerequisite: Geometry and concurrent enrollment in Algebra 2

Credit(s) 1

This course is the equivalent to a first semester college course in algebra-based physics. Topics include: Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. Inquiry-based investigations are emphasized. These investigations are designed to foster student engagement in the practice of science through experimenting, analyzing, making conjectures and arguments, and solving problems in a collaborative setting, where they direct and monitor their progress toward an academic goal. Laboratory investigations are an integral part of this course.

8385_AP PHYSICS 2

Prerequisite: AP Physics 1 or comparable introductory physics course and Pre-calculus or concurrent enrollment in Pre-calculus

Credit(s) 1

This course is the equivalent to a second semester college course in algebra-based physics. Topics include: fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. Inquiry-based investigations are emphasized. These investigations are designed to foster student engagement in the practice of science through experimenting, analyzing, making conjectures and arguments, and solving problems in a collaborative setting, where they direct and monitor their progress toward an academic goal. Laboratory investigations are an integral part of this course.

8390_UCONN ECE PHYSICS 1201Q

Prerequisite: Biology, Chemistry, Algebra 2, concurrent enrollment in Pre-Calculus or Calculus, and a summer assignment prior to the start of the academic year

Credit(s) 1

Grade: 11, 12

This full year college physics course is designed to provide a strong physics foundation for more advanced courses in college science. The topics covered include classical dynamics, rigid-body motion, harmonic motion, waves, fluids, and thermo-dynamics, as well as other selected topics. Laboratory work is a key component of the course and offers fundamental training in precise measurements. Students must have a very strong science and mathematics back-ground to ensure successful comprehension and completion of this course.

8391_UCONN ECE PHYSICS 1202Q

Prerequisites: Completion of UCONN 1201Q with a “C” or better and a summer assignment prior to the start of the academic year

Credit(s) 1

Grade: 11, 12

This full year college physics course is designed to provide a strong physics foundation for more advanced courses in college science. The topics covered include classical electrostatics, electricity, magnetism, optics and modern physics as well as other selected topics. Laboratory work is a key component of the course and offers fundamental training in precise measurements. Students should have a very strong science and mathematics background to ensure successful comprehension and completion of this course.

8460 ENVIRONMENTAL BIOLOGY

Credit(s) 0.5

Students in this course will explore the scientific study of the origins, functions, relationships, interactions, and natural history of living populations, communities, species, and ecosystems in relation to dynamic environmental processes. Students will also study biodiversity, molecular, genetic, and genomic evolution, mesoscale ecology, computational biology and modeling, conservation biology, local and global environmental change, and restoration ecology.

8741 AP ENVIRONMENTAL SCIENCE 8820 UCONN ECE ENVIRONMENTAL SCIENCE

Prerequisites: Biology and Chemistry

Credit(s) 1

This course is an introduction to basic concepts and areas of environmental concern and how these problems can be effectively addressed. Topics include human population; ecological principles; conservation of biological resources; biodiversity; croplands, range-lands, forestlands; soil and water conservation; pollution and water management; and wildlife and fisheries conservation. Laboratory investigations are an integral part of this course.

8760 MARINE BIOLOGY

Prerequisite: Two years of science, one being Biology

Credit(s) 0.5

This course investigates the marine environment of Long Island Sound. The course includes the biological, physical, and chemical factors of the marine environment, and includes marine diversity and ecology. Students' understanding of marine biology is fostered through laboratory investigations and field experiences that include the collection and identification of plant and animal populations from aquatic samples. As a result of this course, students develop a deeper understanding of the concepts and principles of marine biology and its related applications. Laboratory investigations are an integral part of this course.

8510_ FORENSIC SCIENCE
8512_ FORENSIC SCIENCE HONORS

Prerequisite: Biology and Chemistry

Credit(s) 0.5

This course explores the various scientific applications of solving crimes in a comprehensive approach. Students will perform numerous laboratory techniques. This course examines analyzing fingerprints, blood spatter, DNA, firearms and ballistics, arson and explosives, natural and synthetic fibers, documents, impression evidence, glass fragments, and case studies. Laboratory investigations, with an emphasis on qualitative data, are an integral part of this course. Students work independently and as teams to develop, communicate, and defend scientific arguments based on their findings to solve crime scene investigations and to analyze case studies. Students will complete a comprehensive research project including an annotated bibliography and formal presentation.

8200_ HUMAN PHYSIOLOGY
8203_ HUMAN PHYSIOLOGY HONORS

Prerequisite: Biology and Chemistry

Credit(s) 0.5

This course explores the structures and functions of the human body. This course examines: body organization, systems for support and movement, systems of communication, control and integration, transportation, respiration, nutrition, excretion, reproduction, defense, and adaptation. Laboratory investigations, including a fetal pig dissection, are an integral part of this course. Case studies, with an emphasis on bioethics, will be used to understand the connections between the different body systems. Students will complete a comprehensive, independent research project including an annotated bibliography, research paper, and formal presentation.

8870_ PRINCIPLES OF BIOMEDICAL SCIENCE (PLTW)

Credit(s) 1

This is the first of a four-course sequence in which students explore the concepts of human medicine and are introduced to research processes and to bioinformatics. Hands-on projects enable students to investigate human body systems and various health conditions.

8880_HUMAN BODY SYSTEMS (PLTW)

Prerequisite: Principles of Biomedical Science

Credit(s) 1

Students examine the processes, structures, and interactions of the human body systems to learn how they work together to maintain homeostasis (internal balance) and good health. Students work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries.

8910_MEDICAL INTERVENTIONS (PLTW)

Prerequisite: Principles of Biomedical Science, and Human Body Systems

Credit(s) 1

Students investigate a variety of interventions involved in the prevention, diagnosis, and treatment of disease as they follow the lives of a fictitious family. Each family case scenario introduces multiple types of interventions and reinforces concepts learned in the previous two courses, as well as presenting new content.

8920_BIOMEDICAL INNOVATION (PLTW)

Prerequisite: Principles of Biomedical Science, Human Body Systems, and Medical Interventions

Credit(s) 1

PLTW Capstone is a capstone course for students who are completing any of PLTW's high school programs. It is an open-ended research course in which students work in teams to design and develop an original solution to a well-defined and justified open-ended problem. Teams draw on the knowledge, skills, and interests of each member, as they perform research to select, define, and justify a problem. Given this collaboration, team members leave the course with a broadened skillset and an appreciation for learning from their peers. After carefully defining the design requirements and creating multiple solution approaches, student teams select an approach, create, and test or model their solution prototype. As they progress through the problem-solving process, students work closely with teachers and continually hone various skills and abilities. At the conclusion of the course, teams present and defend their original solution to an outside panel.



Polina Whelan

8500_SCIENCE RESEARCH

Credit(s) 1

This is a research and seminar based course for juniors and seniors who have taken biology, chemistry, and physics and are considering studying science at the college level. Students read and research scientific literature and make presentations on critical experiments or new technologies in modern science. By the end of the course students will conduct research and write comprehensive research papers on topics in cutting edge fields such as green energy, nanophysics, and biotechnology.



Maiya Pychil

Alternatives to Dissection

Dissection is one of many instructional methods used in life science courses. Students may request alternatives to dissection. Alternatives include such materials as videos, computer programs, films, models, transparencies, charts, diagrams, dissecting microscopes, and textbook overlays. If alternatives to dissection are requested, teacher assistance will be available at all times, and no grades may be adversely affected because alternatives are requested.

SERVICE LEARNING

Course Offerings

Student Assistant

Technical Assistant

9000_STUDENT ASSISTANT

Credit(s) 1

Grade 12

Students can earn community service hours for completing school-related performance based tasks under the direct supervision of an assigned faculty advisor. Student attendance and successful task completion are major determinants of the course grade. Some of the approved areas in which student assistants have worked in the past include the media center, the school counseling office, and the resource room as tutors.

9020_TECHNICAL ASSISTANT

Prerequisite: Strong Technology Skills and teacher recommendation

Credit(s) 1

Grade 12

Students can earn community service hours for completing school-related technical tasks under the direct supervision of an assigned faculty advisor. Student attendance and successful task completion are major determinants of the course grade. Some of the approved areas in which student technical assistants have worked in the past include setting up for school assemblies, maintaining audio visual equipment, and troubleshooting basic computer or other technical equipment problems.



Mateusz Gazdzicki



Zoe Smith

SERVICE LEARNING

Course Offerings

First-Year Seminar
Senior Internship Experience

9208_ FIRST-YEAR SEMINAR

Credit(s) 0.5

Grade 9

First-Year Seminar is a required course that offers ninth-graders relevant skills, tools, and knowledge to navigate high school effectively and informs decisions for life beyond graduation. This course will introduce 9th graders to the culture of their school, focusing on the traditions, activities, and services available. Students will work on academic planning; career development; and explore related post-secondary education and training options. Topics may include study skills/test preparation, goal setting, career pathways, career planning, course selection, conflict resolution, team building, school climate, advocacy, and others.

9701/9703 - SENIOR INTERNSHIP EXPERIENCE

Credit(s) 0.5 - 9701
Credit(s) 1.0 - 9703

Grade 12

The Senior Internship Experience (SIE) allows seniors to explore an area of interest outside the constructs of their formal educational program. By helping foster independence and decision-making skills, the SIE will give students the opportunity to develop and make a smoother transition from high school to college, trade school, the workplace, or military service. The students can explore a career interest or service opportunity in a particular field or self-design their internship experience. Students earn .5 credits for 60 hours or one credit for 120 hours for the internship. A work-based safety training and an approval process are required before starting the internship.



Elizabeth Ryklin - Grade 12

SOCIAL STUDIES

The Social Studies program is designed to prepare students to take an active role in the affairs of their local, state, national, and global communities. It explores the traditions and ideals of our national heritage and their relationship to the history of the world. The focus is on the process of reaching rational decisions based on facts gathered through research; the rules and responsibilities of a just society; the importance of economic and geographic relationships; and the richness of our history and its diversity. With a thorough knowledge of historic foundations, students develop the skills and competencies to become responsible citizens in our democratic society.

****All courses will run next year based upon student requests. We may not run the course if a course is not at 80% capacity.**

Course Offerings

Required for Freshmen:

Social Studies 9: Modern World History
 Social Studies 9: Modern World History honors

Recommended for Sophomores:

World History Electives
 African-American/Latino/Puerto Rican Studies
 United States History to 1877

Recommended for Juniors:

US History Electives
 United States History Since 1877
 UCONN ECE/AP US History Since 1877

Required for Seniors:

Civics 1 & 2 or
 UConn ECE/AP United States Government & Politics

US History Electives

African-American/Latino/Puerto Rican Studies
 United States History: Global Interactions
 United States History: The American People
 United States History to 1877
 UCONN ECE/AP US History Since 1877

World History Electives:

The Middle Ages
 Middle Eastern Studies
 UConn ECE/AP European History
 Human Rights/Model United Nations
 AP Human Geography

Additional Electives:

Debate and Rhetoric
 Debate and Rhetoric honors
 Advanced Debate and Rhetoric
 Introduction to Psychology
 Introduction to Sociology
 AP Psychology
 UConn ECE/AP Macroeconomics
 UConn ECE/AP Microeconomics

5010_SOCIAL STUDIES 9: MODERN WORLD HISTORY
5000_SOCIAL STUDIES 9: MODERN WORLD HISTORY HONORS

Credit(s) 1

Students in this course will learn the history of the modern world. Topics include: the age of revolution, industrialization, imperialism, World War I, World War II, the Cold War, the independence movements, and globalization.

5891_HUMAN RIGHTS/MODEL UNITED NATIONS

Credit(s) 0.5

Students in this course will examine the philosophical foundations, practical application, and limitations of human rights in the twentieth century. The history of the United Nations will be at the heart of case studies such as war, genocide, and terrorism will sharpen our focus and provide tangible examples of the UN's limitations and successes. These studies will also serve as the basis for our Model UN simulations that aim to teach students modern human rights history via an experiential learning format.

5211_ UNITED STATES HISTORY: GLOBAL INTERACTIONS

Credit(s) 0.5

Students in this course will examine America's global interactions in the 20th and 21st centuries. A thorough focus on immigration and various foreign policy actions, from World War I to the War on Terror, will provide the students with a stronger understanding of America's standing in the world today.

5212_ UNITED STATES HISTORY: THE AMERICAN PEOPLE

Credit(s) 0.5

Students in this course will explore, analyze and compare stories of different groups in American History with an emphasis on the 20th and 21st centuries. Students will learn about the struggles, contributions and successes of Native Americans, Latinos, African Americans, European Americans, Asian Americans, LGBTQ+, and Women. Students will also contextualize these narratives into the broader scope of United States History.

5200_UCONN ECE/AP UNITED STATES HISTORY SINCE 1877

Credit(s) 1

This full-year introductory college-level course examines the political, economic, cultural and social factors that have shaped American history since 1877. Topics include the Gilded Age, populism, progressivism, isolationism, American involvement in two World Wars, the Cold War, the Civil Rights Movement, and the debate over American exceptionalism.

5710_CIVICS 1

Credit(s) 0.5

This Civics 1 course focuses on values and principles of American democracy and the structure of state, local, and federal government. The course examines the relationship between the United States and other nations in regard to foreign affairs and includes a study of media, political parties, minority groups, and special interest groups in the service of preparing students to assess their roles and responsibilities in the American political system.

5730_CIVICS 2

Credit(s) 0.5

The Civics 2 course is a continuation of Civics 1 and will focus on important principles of American Democracy including the structure and function of state and local government. This course will also examine the impact of interest groups and the media on the political process and the relationship between the United States and other nations in regard to foreign policy and international relations.

5950_ UCONN ECE/AP UNITED STATES GOVERNMENT AND POLITICS

Credit(s) 1

AP United States Government and Politics is an introductory college-level course in US government and politics. This course introduces key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behavior. In addition, students will complete a political science research paper or applied civics project.

5830_ THE MIDDLE AGES

Credit(s) 0.5

This course is a review of the 1000 year period from the fall of the Roman Empire through the Reformation. It begins with the Barbarian invasions, rise of Germanic cultures, the High Middle Ages with the Crusades and advances in science and technology, and the High Middle Ages including the Renaissance and the Reformation.

5660_ MIDDLE EASTERN STUDIES

Credit(s) 0.5

Students in this course will take a detailed look at the individuals, events, and movements that have shaped the modern Middle East from the Arab-Israeli conflict to the September 11 attacks. Through individual research and classroom inquiry the students will gain a greater understanding of the history that has produced the complex and nuanced Middle East we know today.

5860_DEBATE AND RHETORIC
5865_DEBATE AND RHETORIC HONORS

Credit(s) 1

Students in this course will learn methods of debate and rhetoric. Students learn how to: communicate clearly and persuasively; construct and deliver strong arguments; think and speak on their feet; and research topics efficiently and effectively. Additionally, students learn about current events and contemporary issues in the United States and the rest of the world. This class is open to seniors and juniors. Freshmen and sophomores may enroll with instructor's permission.

5861_ADVANCED DEBATE AND RHETORIC

Credit(s) 1

Students in this course will expand and refine their debate and rhetoric skills. Students will not only continue to work on extemporaneous debate but also explore other debate formats. In the process, students will learn advanced research skills, philosophy, logic, and decision theory. This course is open to sophomores, juniors, and seniors and is intended for students who have completed the Debate and Rhetoric course or have experience with competitive formal debating.

5640_UCONN ECE/AP EUROPEAN HISTORY

Credit(s) 1

AP European History is an introductory college-level European history course. This course will cover historical developments in European history from 1500 to the present.

5690_AP HUMAN GEOGRAPHY

Prerequisite: Social Studies 9: Modern World History

Credit(s) 1

Grades: 10, 11, 12

This course introduces students to the systematic study of patterns and processes that have shaped human understanding and use of the Earth's surface. Students use spatial concepts and analysis through the study of geographic research methods and tools, population and migration, political geography, agriculture and rural land use, cities and urban land-use, and industrial and economic development.

5980_UCONN ECE MACROECONOMICS

Credit(s) 0.5

Students in this course will learn the organization and function of the economic system as a total unit; economic decisions, institutions, and policies that determine levels and rates of growth of production, employment, and prices; and topical subjects (e.g., government budget deficits and current interest rate policy).

5820_UCONN ECE MICROECONOMICS

Credit(s) 0.5

Students in this course will learn how the invisible hand of the market functions through the economic decisions of firms and individuals; how prices, wages, and profits are determined; how resources are allocated; how income is distributed; and topical subjects (e.g., energy policy and health care).

5610_INTRODUCTION TO PSYCHOLOGY

Credit(s) 0.5

This course is a survey of topics in the field of psychology. Topics include biological influences on behavior, personality, learning, memory, and abnormal psychology.

5040_SOCIOLOGY

Credit(s) 0.5

Students in this course will study the nature of society as it relates to various topics including racial and ethnic identity, gender, class, education, and urban issues.

5970_AP PSYCHOLOGY

Prerequisite: Social Studies 9 and Modern World History

Credit(s) 1.0

Students in this course will explore the ideas, theories, and methods of the scientific study of behavior and mental processes. They will examine the concepts of psychology through reading and discussion and analyze data from psychological research studies.

5391_AFRICAN-AMERICAN/LATINO AND PUERTO RICAN STUDIES

Credit(s) 1

This course is offered as a full-year elective course that provides students with a better understanding of the African-American, Black, Puerto Rican, and Latino contributions to United States history, society, economy, and culture. The first semester will be African-American Studies with emphasis on African origins and contributions of Ancient African empires, slavery and freedom stories of resistance and agency, Black literacy, organization, and liberation, history of equity, Black movement for equity and protest, politics and power.

The second semester will be Latin American/Puerto Rican Studies with emphasis on Who are we? (Latino vs Hispanic) Early beginnings: Indigenous tribal history of Aztecs, Maya, Incas and Taino people, Blood and Beauty: Conquest and slavery, Sweat: Colonial era of North and South America, Resistance: Revolution and Protest Movements, and Where are we now: Contemporary Latino and Puerto Rican history in the United States and Latin America. This course is aligned with Connecticut Social Studies Frameworks. The course is an opportunity for students to explore accomplishments, struggles, intersections, perspectives, and collaborations of African American/Black and Puerto Rican/Latino people in the U.S.



Mia Lopez Marroquin

WORLD LANGUAGE

Modern technology has made it imperative that we learn to communicate successfully with people of other lands in and through their native language. The AITE World Languages program provides for instruction in five modern languages as well as in the classical language of Latin. The program emphasizes communication and understanding and appreciation of other people’s literature and culture. It also recognizes the need for developing speaking competence and proficiency in the language of the student’s choice, as related to possible career goals. World language classes are taught according to the Stamford Board of Education and State of Connecticut curriculum guidelines of communication, cultures, connections, comparisons, and communities. Using interdisciplinary philosophies as well as varied technology-based strategies, students learn to communicate effectively in a target language as citizens of the global community. It is recommended that students complete a minimum of a four-year sequence in one of the six world languages.

****All courses will run next year based upon student requests. We may not run the course if a course is not at 80% capacity.**

Course Offerings

French 3 and 4 UConn ECE French AP French (VHS)	Mandarin Chinese 1, 2, 3, 4 AP Chinese Language and Culture	Spanish 1, 2, 3, 4 Spanish 5 honors Heritage Spanish 1 Heritage Spanish 2 honors AP Spanish Language UConn ECE Spanish
Latin 1, 2, 3, 4 AP Latin		

4300_FRENCH 3

Credit(s) 1	This course develops language acquisition more in depth through the four language skills: listening, speaking, reading, and writing, with an increasing emphasis on reading a wider variety of materials. Students will achieve a higher degree of comprehension and will be able to communicate cultural materials in broader terms by making presentations, writing compositions, doing readings, dictations, and presenting their own skits. Students are expected to participate in the COLT Annual Poetry Contest and in Le Grand Concours.

4400_FRENCH 4

Credit(s) 1

This course is focused on listening, speaking, reading, and writing at the intermediate/pre-advanced proficiency levels through a variety of authentic resources such as radio and TV announcements, newspapers and magazines, Francophone literature, as well as other nonfiction texts. Students will demonstrate their oral proficiency through debates and discussions of historical, social, and cultural aspects of life in the target language. Students are expected to participate in the COLT Annual Poetry Contest and in Le Grand Concours.

4540_UCONN ECE FRENCH

Prerequisite: Satisfactory completion of French 4

Credit(s) 1

Selected instructors who are certified by UConn may offer this as an option through the UConn Early College Experience program, either concurrently with enrollment in an upper-level French course or as a separate course. The instructors have the option of offering one course as a year-long 3-credit course or one 3-credit course each semester for an annual total of 6 credits. The courses which may be offered are French 3267 French Language and Culture or French 3268W Writing in French. Course descriptions and other information may be found at www.ece.uconn.edu/courses/subj/french.php. Students enrolled in French 3268W have specific requirements for course completion, such as writing a 5-page paper in French and following UConn's requirements for a writing intensive course.

4500_AP FRENCH (Virtual High School)

Credit(s) 1

This course is designed to develop highly sophisticated communicative skills and to meet the objectives of a rigorous course of French completely over the Internet at the college level. Attention is given to reading, analyzing, and producing in-depth critical thinking on historical, contemporary, and literary issues in both oral and written forms. Students will participate in online class discussions in the target language.

4150_LATIN 1

Credit(s) 1

This course develops an understanding of Latin through the study of grammar, vocabulary, translations, familiarization with Roman civilization and culture, and the practical use of the language. Students will make connections between the ancient world and the modern world. Students are expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

4250_LATIN 2

Credit(s) 1

This course is designed to enrich the work of Latin 1 through the completion of forms, fundamentals of construction, increased vocabulary, and the readings of mythological tales. In addition students will develop an understanding of Roman culture and history. Students are expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

4350_LATIN 3

Credit(s) 1

This course emphasizes advanced work in Latin vocabulary and English derivatives since 60% of English words are derived from Latin. The class will focus on poetry and composition as well as the study of Virgil. While this course prepares students for the SAT verbal section, it also strengthens grammar skills and connections across the curricula. Students are expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

4450_LATIN 4

Credit(s) 1

This course emphasizes advanced work in Latin vocabulary and English derivatives. The class will focus on poetry and composition as well as the study of Virgil, Catullus, Horace, and Pliny. In addition to traditional assessments, students will demonstrate their understanding of how Latin literature has influenced English literature through various projects. Students are also expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

4550_AP LATIN

Credit(s) 1

This course is designed to meet the objectives of a rigorous course of Latin at the college level. In addition to advanced grammar and syntax, students will engage in sophisticated literary criticism of texts via class discussion and essays. Students are expected to participate in the COLT Annual Poetry Contest and the National Latin Examination.

4180_MANDARIN CHINESE 1

Credit(s) 1

This is an introductory course in the Mandarin language and Chinese culture emphasizing the development of basic skills: Pinyin, pronunciation, tones, listening and speaking as well as the reading and writing of Chinese words. In addition to traditional methods of assessments, students will role-play, make small oral presentations and engage in guided conversations. Students also study Chinese mythology and Chinese calligraphy. Students are encouraged to participate in the COLT Annual Poetry Contest.

4710_MANDARIN CHINESE 2

Credit(s) 1

This is the continuation of Mandarin 1 and Chinese culture. Emphasis is placed on the development of basic skills: listening, conversation, comprehension, reading and paragraph writing. In addition to traditional methods of assessments, students will role play, make small oral presentations and engage in guided conversations. Students also study Chinese geography. Students are encouraged to participate in the COLT Annual Poetry Contest.

4840_MANDARIN CHINESE 3

Credit(s) 1

This course develops language acquisition in depth through the four language skills: listening, speaking, reading and writing with an increasing emphasis on reading a wider variety of material. Students will achieve a higher degree of comprehension and will be able to communicate cultural material by making presentations, writing compositions, and conducting discussions. Students research and give presentations on Chinese holidays. Students are encouraged to participate in the COLT Annual Poetry Contest.

4860_MANDARIN CHINESE 4

Credit(s) 1

In this course students read and write a variety of complex texts such as advertisements, news reports and essays, while they continue to build conversational and listening skills. Students also study a selection of Chinese literature. An introduction to Chinese history is embedded in the language lessons. Students are encouraged to participate in the COLT Annual Poetry Contest.

4750_AP CHINESE LANGUAGE AND CULTURE

Prerequisite: Approval of the instructor

Credit(s) 1

This is an intensive course in Chinese language and culture for students with a minimum four years of previous study in Chinese. The course consolidates conversational, listening, reading and writing skills for daily life. Furthermore, students read, write and conduct discussions in depth in Chinese on topics ranging from geography, history, and social customs, to Chinese arts. They also read a selection of original texts from *The Analects*, and Tang and Song poetry. Students examine, describe and analyze a variety of cultural artifacts and try to transform and make connections.

Norran Hassan



4130_SPANISH 1

Credit(s) 1

This introductory course is designed for students with little or no previous study of Spanish, focusing on all four language skills: listening, speaking, reading, and writing, while emphasizing oral communication and cultural connections. In addition to traditional methods of assessments, students will role-play, make small oral presentations, and engage in guided conversations. Students are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish Examination.

4230_SPANISH 2

Credit(s) 1

This course continues to develop the skills begun in Spanish 1 through listening, speaking, reading, and writing, with a special emphasis on oral communication and cultural connections. In addition to traditional methods of assessments, students will role-play, make small presentations, and engage in guided conversations. Students are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish Examination.

4330_SPANISH 3

Credit(s) 1

This course develops language acquisition more in depth through the four language skills: listening, speaking, reading, and writing, with an increasing emphasis on reading a wider variety of materials. Students will achieve a higher degree of comprehension and will be able to communicate cultural materials in broader terms by making presentations, written compositions, readings, dictations, and presenting their own skits. Students are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish Examination.

4430_SPANISH 4

Credit(s) 1

This course is focused on listening, speaking, reading, and writing at the intermediate/pre-advanced proficiency levels through a variety of authentic resources such as radio and TV announcements, newspapers and magazines, literature from Latin America and Spain, as well as other nonfiction texts. Students will demonstrate their oral proficiency through debates and discussions of historical, social, and cultural aspects of life in the target language. Students are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish Examination.

4680_SPANISH 5 HONORS

Prerequisite: Spanish 4

Credit(s) 1

This course is designed to provide students with continued instruction in Spanish prior to the AP Spanish Language course. This course will focus on broad themes, including society and its problems, education and finance, art, media, and literature. Students will continue to fine tune their Spanish vocabulary and grammatical structures from previous years of study.

4131_HERITAGE SPANISH 1

Credit(s) 1

This course is designed for students with no formal education in the Spanish language but who were born in Spanish speaking homes. Attention is given to language misconceptions and anglicized expressions that are common to Spanish speakers born in the United States. Grammar and vocabulary are taught in context through age appropriate readings of short stories, periodicals, thematic essays, and poetry. Upon completion of this course, students are better prepared for advanced level language courses.

4231_HERITAGE SPANISH 2 HONORS

Credit(s) 1

This course requires students to achieve more sophisticated and complex structures in spelling, grammar, and literary forms of the Spanish language in an effort to become truly literate or bilingual. Through the study of Latin American authors and their literature, students will develop interpretive skills and will become fluent in written response to literature.

4530_AP SPANISH LANGUAGE

Prerequisite: B or higher in Heritage 2 or successful completion of Spanish 5 honors

Credit(s) 1

This course is designed to develop highly sophisticated communicative skills and to meet the objectives of a rigorous course of Spanish at the college level. Attention is given to reading, analyzing, and producing in-depth critical thinking on contemporary and literary issues in both oral and written forms. Students will participate freely and fluently in class discussions in the target language and are encouraged to participate in the COLT Annual Poetry Contest and the National Spanish examination.

4535_UCONN ECE SPANISH

Prerequisite: Must have completed Spanish 1, 2, 3, 4, and be able to understand, speak, read, and write Spanish proficiently.

Credit(s) 1

UConn's Early College Experience (ECE) Spanish course is an opportunity for high school students to earn college credit after successful completion of the same Spanish course offered at UConn, for a fraction of the cost.



Michele Bermeo

OTHER ACADEMIC SUPPORT

Stamford Public Schools provide a wide range of services and supports. Differentiated instruction and inclusive best practices are implemented to address individual learning styles and needs.

9740 _INDIVIDUAL EDUCATIONAL DEVELOPMENT PROGRAM

Credit(s) 1

This course provides direct assistance to identified students in grades 9-12. The course focuses on continuous skill development for academic excellence, studying, self-advocacy, self-management and independence, compensatory learning, peer and adult relationships, and preparation for post-secondary experiences. While earning credits toward a high school diploma, students apply skills learned to the everyday classroom setting and life situations.

Administrative approval required.



Miguel Xique Cielo



Samantha Loy



Sarina Nelson



Stephanie Petersen



Yani Reyes